

sidering the particular Structure of that Substance, as describ'd by the late Learned Dr. Hook, in his *Micrographia*.

VII. *A Lettrr from Mr. Edward Naish, Surgeon in York, to Claudio Amyand, Esq; Serjeant-Surgeon to his Majesty, and F. R. S. Concerning an Ossification of the Crural Artery.*

Yorke, Sept. 11. 1721.

MR. *Consett*, of *Cleveland in Yorkshire*, a Gentleman of Sixty seven Years of Age, who all his Life before had enjoy'd a perfect good State of Health, sent for me on account of a Mortification, which began about a Month before on one of his Toes, and by gradual Advances in that Time had reach'd half way his Leg ; and this without any manifest Cause. This was the State I found him in ; viz. a perfect Mortification, or *Sphacelus* of his Foot, and half his Leg. In such a Case, what was to be done ? The Gentleman saw himself dying daily by Piece-meal ; but Heart-whole, as he express'd it, and had a pretty good Pulse. I proposed Amputarion, as the only Remedy, which (I told him) would give him some Chance for his Life ; tho' the Odds was against him. This he readily consented to ; and as soon as I could get my Dressings ready, I went about the Operation ; assisted by Mr. *Mitford*, a Surgeon of *Northallerton*, and Mr. *Moon* of *Stockton*, who before had attended the Gentleman.

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The Leg being taken off at the usual Place, (which was four Inches above the Mortification) about two or three Ounces of Blood issued out from the Muscular Part ; but upon slackening the Turniket, in order to look for, and tye the Artery, not one Drop of Blood flow'd out ; to my no small Surprise. And upon feeling the Extremity of the Artery, I found it hard and callous ; however, I secur'd it by a Ligature, as usual, and dress'd the Stump. The Patient (who had born the Operation with the greatest Resolution) being put to Bed, I was desirous to examine the Leg ; and having dissected the Artery, with its two considerable Branches as far as the *Tarsus*, I found them for the most part ossified ; that is to say, the Trunk, where it was amputated, was ossified about two thirds of its Circumference. About a Quarter of an Inch lower, the whole was bony, leaving so small an Orifice, that it would only admit of a Hog's Bristle ; not a very fine Probe, that I endeavour'd to introduce. A little lower, it was on one side bony, on t' other membranous ; then again an entire Case of Bone. Here and there, for the Breadth of a Barly-Corn, there would be no Bone at all. I open'd about two Inches of the internal Branch immediately above the *Malleolus*, it appearing blacker than the rest. After it had been wash'd, I found in it about two or three Drops of coagulated Blood ; and now 'tis expanded and dry'd, 'tis one entire *Lamina* of Bone, as thick as the Shell of a Pigeon's Egg, and of an unequal Surface. I dissected three Ramifications of this internal Branch into the Foot ; only one of them had a very small Bit of Bone in it, about half an Inch from the Trunk. The other great Branch, that runs

on the Ligament that ties the Fociles together, was not so much ossified as that which I have described.

This Ossification (which is the compleateſt of any I have yet heard of) was, no doubt, the Cause of the Mortification, and of the Death of my Patient, which follow'd four Days after the Amputation, as Mr. *Mitford* inform'd me, being oblig'd to leave him the next Morning ; though I should have been curious, had I been present, to have seen how high the Oſſification reach'd.

I must observe to you, That this bony Shell, or *Lamina*, was contain'd within the Tunics, or Coats of the Artery. I don't doubt, but these Cases are more common than we imagine. For when we see Mortifications feize the Extremities of Aged People, which we commonly attribute to a Decay of Nature, or an Extinction of the Vital Warmth ; this, I believe, is often the Cause. And I am the more inclin'd to think so, from two or three parallel Cases I have been concern'd in, since I came into *Yorkshire*.

I am, &c.

Edward Naiſſ.